

2006 National Leadership Grant
Sample Narrative

Building Digital Resources

Walker Art Center
Minneapolis, MN

ArtsConnectED II

Abstract

Since 1998 the ArtsConnectEd Web site (www.artsconnected.org), a partnership education and digitization project of The Minneapolis Institute of Arts and Walker Art Center, has provided K-12 educators in the Upper Midwest with access to a deep repository of what is now more than 14,000 digital art images and related content that support arts-integrated education. To date, more than 3,000 K-12 teachers have participated in workshops focusing on the effective classroom use of ArtsConnectEd. This participation has increased steadily to 347 percent more users since 2001, the first fiscal year for which statistics are available. During fiscal year 2005, ArtsConnectEd served a total of 1.7 million users.

The dramatic success of ArtsConnectEd has demonstrated the power of the Internet to effectively disseminate museum education content, but this exciting new potential also presents a number of new obstacles. Most museum educators currently rely on technologists and databases housed in other museum departments to support their online initiatives and create new content. These relationships can challenge the feasibility and financial viability of many online education programs, since they typically require dedicated budgets for interdepartmental work and often special project status.

Fortunately, new technologies can provide capabilities that allow museum education departments to take control of their online assets and better respond to the growing needs of the classroom teacher. This project will substantially expand these core capabilities and the benefits they provide to both the museum educator and the classroom teacher by redesigning ArtsConnectEd. ArtsConnectEd II (ACE II) will be a dynamic, open-source site, allowing museum educators at the two partner institutions to produce and manage content directly.

The goals of this proposed three-year project are to:

- Improve and expand ArtsConnectEd functionality by redesigning the Web site.
- Empower museum educators and classroom teachers to create and manage educational content from museum assets through new online tools.
- Redefine the relationship of museum educators to both their institutions and the K-12 education community by achieving project outcomes.

The project will be managed in three phases: research, development, and implementation. Each of these phases will focus on refining, expanding and testing new tools and functionality for internal museum educators and classroom communities of teachers and students. The resulting outcome of the redesign of ArtsConnectEd will be to give museum educators control of their online offerings, strengthening their independence as content creators and allowing increased interaction with their K-12 constituency.

ArtsConnectEd, a demonstrated leader in the field, is in a unique position to have a profound impact on future innovation in national museum education. The proposed changes to ArtsConnectEd will provide the museum field with an innovative model for how museums can adopt new technologies that best serve the changing needs of educators. The changes will also sustain the partnership of the two museums and enable it to grow.

1. ASSESSMENT OF NEED

Since 1998 ArtsConnectEd, a joint education and digitization project developed by The Minneapolis Institute of Arts and Walker Art Center, has provided K-12 educators in the Upper Midwest with access to a deep repository of what is now more than 14,000 digital art images, education content relevant to a broad curriculum, and other thematic resources to support arts-integrated education. A comprehensive Web site, ArtsConnectEd (www.artsconnected.org), was conceived as a regional resource for K-12 educators and launched with funding from the state of Minnesota. More than 3,000 K-12 teachers have participated in regional workshops focusing on the effective classroom use of ArtsConnectEd. Teacher training and other outreach efforts have increased participation steadily to 347 percent more users over 2001, the first fiscal year for which statistics are available. During fiscal year 2005, ArtsConnectEd attracted 1.7 million users.

The dramatic success of ArtsConnectEd has demonstrated to museum educators at each partner institution and to museum educators everywhere the power of the Internet to effectively disseminate museum education content. This exciting new potential also presents a number of new obstacles. Most museum educators rely on technologists and databases housed in other museum departments to support their online initiatives. This dependent relationship challenges the viability of many online educational initiatives, since they typically require dedicated budgets for interdepartmental work, and are often in competition with other museum priorities.

Fortunately, new technologies and tools such as blogs, Wikis, and content management systems can provide opportunities for museum education departments to take control of their online assets and better respond to the growing needs of the classroom teacher. This project aims to define these core capabilities and the benefits they provide to both the museum educator and the classroom teacher by redesigning ArtsConnectEd into a dynamic, open-source site, allowing museum educators at the two partner institutions to produce and manage content directly.

The new ArtsConnectEd (ACE II) will allow museum educators to rely less on technologists for the creation and management of online teaching and learning resources, and become more technically skilled themselves as they learn to use new tools to create and manage content. In turn, technology staff can devote greater attention to site infrastructure. In addition, the development of ACE II will be replicable, disseminating solutions throughout the museum field so that other institutions may adopt aspects of the project for their own educational work.

The development of ACE II will be a direct response to identified classroom teacher needs. In 2005, an outside evaluator contracted by ArtsConnectEd conducted six focus groups of practicing Minnesota teachers who provided valuable feedback regarding how teachers use ArtsConnectEd and other museum education sites. Teachers felt the most useful Web sites provided easily accessible resources that supported their teaching, as well as supported their professional community. They wanted to learn from other teachers, be able to use products created for classroom use, and share example ideas with other professionals. Very few sites offer users an interface to share best practices, educators' classroom-tested curricula or lesson plans which incorporate site content. While classroom teachers may share lessons with museum educators, museum educators currently have no mechanism to distribute contributed resources through ArtsConnectEd (see Attachment 1: "ArtsConnectEd Focus Group Research Report.").

The solid partnership and highly successful collaboration between The Minneapolis Institute of Arts and Walker Art Center, and a proven track record with teachers and museum educators involved at every level, make ArtsConnectEd ready to step into the future and take advantage of new technologies and tools to address the changing educational landscape in both museums and K-12 classrooms.

2. NATIONAL IMPACT AND INTENDED RESULTS

ArtsConnectEd is a national and international model for a comprehensive digitized collection of resources created for K-12 educators. Named Best Museum Educational Site at the international Museums & the Web conference in March 1999, ArtsConnectEd received the Gold MUSE Award at the American Association of Museums conference

in April 1999. Museum educators nationwide have developed similar projects built upon ArtConnectEd's approach and tools, such as The Art Institute of Chicago's Art Explorer, funded in part by an IMLS grant. Other sites have used ArtsConnectEd as a reference point for their work, such as ARTstor, Virtual Museum of Canada, North Carolina Museum of Art's ArtNC, and The Whitney Museum's new Learning@Whitney. ArtsConnectEd, a demonstrated leader in the field, is in a unique position to have a continuing and profound impact on national museum education.

While some educational sites offer tools for the development of teacher resources, such as The WebQuest page at San Diego State University (webquest.sdsu.edu/) and New York Historical Society (AmrevOnline.org), other art museum sites offer access to works of art from their collections (Los Angeles Country Museum of Art, the National Gallery, and The Metropolitan Museum of Art). With its combination of tools and combined collections of the two partner museums, ACE II will be the most comprehensive site to date. ACE II's open source (non-proprietary) site structure will be replicable, disseminating solutions throughout the museum field so other institutions may adopt aspects of the project for their own educational work. An administrative-level set of tools will be designed specifically to meet the needs of the museum educators who will be using ACE II as their primary vehicle for interfacing with classroom teachers. These tools will draw from new technologies designed for sharing resources, such as Flickr, Del.icio.us and WordPress blogs, and open-source applications, such as Pachyderm, STEVE, and Zoomify.

Museum educators need three things to fully control their online presence and interaction with classroom teachers and others in education communities served by the museum, without reliance on support from departments traditionally providing technical, curatorial and registration support. They are: 1) tools for creating content; 2) capabilities for editing, organizing and promoting museum and classroom teacher created content; and 3) features, such as blogs, newsletters and resource sets. ACE II will result in authentic, two-way collaborations between museum educators and classroom teachers, redefining the relationship of museum educators to both their institutions and the K-12 education community in documented models that have the potential for successful, widespread adaptation in other museums.

3. PROJECT DESIGN AND EVALUATION PLAN

ACE II will be managed in three phases: research, development, and implementation. Each of these phases will focus on refining, expanding and testing new tools and functionality for internal museum educators and classroom communities of teachers and students. Two project directors, one from each museum, will lead the project and work closely with a project manager. Technical directors and staff committees composed of personnel from both museums will also serve on the ACE II project team (see Section 4: Project Resources and Management for a complete list of project team members, their qualifications and roles). Evaluation is an integral part of each phase of this project. An external project evaluator will be contracted and brought onboard at the beginning of the project to develop a formal assessment and evaluation plan that will extend through all three phases. The majority of the evaluation strategies will involve formative methods to help ensure achievement of all identified outcomes.

The project goals for ACE II are to:

- Improve and expand ArtsConnectEd functionality by redesigning the Web site.
- Empower museum educators and classroom teachers to create and manage educational content from museum assets through new online tools.
- Redefine the relationship of museum educators to both their institutions and the K-12 education community by achieving project outcomes.

Phase I: Research

The research phase of the project will focus on analyzing and assessing the current features and functionality of ArtsConnectEd from both the museum educator and classroom teacher perspectives. Many of the educators within the Institute and the Walker have been closely involved in advocating for and supporting ArtsConnectEd as their

primary vehicle to provide teachers with resources and programming information over the past eight years. From this experience, and the transition of moving from traditional (print, slides, video, etc.) resources to primarily Web-based teacher support, these museum educators have strong opinions about which features and functions work, which do not, and what additional features and functions are needed.

To formally articulate these needs, an 8 to 12 member Teacher Services Committee will be formed with representatives from both museums' education departments. The ACE II project manager will utilize a standard set of questions to interview members of this committee. Information will be collected about the types of capabilities the committee members need to fully support, expand, and administer this type of resource and redefine their role as museum educators in the online environment.

Since the beginning of ArtsConnectEd, classroom teachers provided significant end user data about the site's design, tools, content and overall functionality through participation in extensive usability testing, focus groups, email commentary, and outreach program evaluation. This teacher-generated information, combined with the formally gathered input from the museum educators, will help define baseline project needs.

The ACE II project team will also survey and inventory the related tools and administrative features and functions of leading museum and educational sites, as well as select commercial sites, such as Amazon, Flickr, Google, Del.icio.us, Clipmarks, Flash Photoblog World Map, WordPress blog and the KodakGallery. Potentially applicable open-source applications, tools, and projects will also be surveyed including Pachyderm, STEVE, Zoomify, Joomla, and Imagemagick to determine their applicability to the identified needs.

Simultaneous to the feature and function survey, the ACE II project directors will identify a group of 10 to 12 Power Users. This group of highly committed and experienced K-12 educators who currently use ArtsConnectEd in their teaching will include former ArtsConnectEd teacher trainers and be augmented by college faculty engaged in training pre-service K-12 educators. These Power Users will be selected based on their professional roles, interest and availability and will serve as paid consultants representing the classroom teachers as end users throughout this project. In the research phase, the Power Users will be asked to identify the strengths and weaknesses of ArtsConnectEd from the classroom teacher's perspective in regards to both available tools and resources.

At the conclusion of the research phase, the project team will develop a master document and link list summarizing all of the internal and external user requirements and related examples gathered from focus groups, background information, surveys and inventories. These potential options, along with other identified needs, will be formally reviewed and vetted in focus groups of the Power Users as well as the project staff from both museums, to define specifications for ACE II's core set of tools and overall functionality.

Phase II: Development

The development of ACE II will take place in four stages: creation of new system architecture, tool development and integration, user interface design, and data management. Formative usability testing will be carried out throughout the entire development phase. The Teacher Services Committee and the Power Users will provide live evaluation throughout all four stages of project development.

Creation of New System Architecture

ArtsConnectEd as it exists today was developed using Macromedia's ColdFusion, a proprietary Web developer's tool. New system architecture for ACE II will be written in PHP, a widely used open-source Web application scripting language. Data will be stored in a SQL database using an open-source product such as MySQL or PostgreSQL. To facilitate cross-institutional development, the Web interface presentation layer of the system will be separated from its functional layer and data logic. By keeping distinct boundaries between the storage, processing, and presentation of data, the interface designers and application programmers can work on different files at the

same time to decrease development time. This approach generally leads to improved maintainability as well, as developers can make logic changes without impacting the design, and vice versa.

On their institutional Web sites, the Institute and Walker have been moving toward open standards-based technologies and developing applications that serve as prototypes for the kind of features and functionality that will be found in ACE II. The Walker recently completed a redesign of its Web site, which is now database-driven and generated using an Extensible Markup Language (XML) application server and World Wide Web Consortium (W3C) standards. This approach allows the Walker to use its data for multiple applications beyond the Web site, including Really Simple Syndication (RSS) feeds for news aggregators and a Voice Extended Markup (VXML) interactive, audio-based telephony application called Art on Call (see newmedia.walkerart.org/aoc/). The Institute is in the process of redesigning its Web site, applying a PHP technical infrastructure. The Art of Asia Web site (artsmia.org/art-of-asia/) is the first implementation of this new widely adopted, open source technology at the Institute. The use of PHP will enable constant upgrading by the user community.

Tool Development and Integration

Once the new infrastructure is in place, the core set of tools identified in the research phase will be designed and developed making use of existing open-source resources wherever possible. Where existing products are not available or are insufficient for meeting identified needs, the project manager, with review and feedback from programmers and project directors, will create specifications for new tools. An administrative-level set of tools will be designed specifically to meet the needs of the museum educators who will be using ACE II as their primary vehicle for interfacing with classroom teachers. These will likely include tools for creating content, capabilities for editing, organizing and promoting museum and classroom teacher created content, and features, such as blogs, newsletters and resource sets. Interfaces for managing the museum educator and classroom teacher contributions of education-specific metadata (community tagging) to existing digital assets are also likely to be developed. These tools will be directed at empowering museum educators to fully control their online presence and interaction with classroom teachers and others in education communities served by the museum, without reliance on support from departments traditionally providing technical, curatorial and registration support.

A complementary set of tools will also be improved and developed for K–12 classroom teachers. The current ArtsConnectEd provides a number of historically ground-breaking tools, including one called Art Collector (www.artsconnected.org/art_collector/). With this tool, teachers can search for art works, organize them into “collections,” select and save details, add customized text, access the collection later through a user log-in, use the collection for classroom presentations, and publish it with a unique URL. Teachers and students currently use this tool for everything from personal reference to writing assignments, presentations and quizzes. ACE II will greatly expand the personal and public functionality of this tool and others by adding a range of new capabilities identified by museum educators and classroom teachers. Expanded functionality could include tools for comparing and contrasting works of art, generating personal timelines, graphic annotation, connecting related content, assessment, geographic mapping, state-of-the-art printing, publishing and presentation, community cataloging and others.

User Interface Design

A new user interface will be developed throughout the entire site, providing user-friendly access to and navigation of the new public and internal tools and functionality. Once the beta site has been fully realized, the project team will formally test the site and user-specific tools in a usability laboratory with classroom teachers and members of the Teacher Services Committee. If this project is funded, the ACE II project team will approach Target Corporation to donate the use and services of their usability laboratory. Target has donated the use of this space in the past to test ArtsConnectEd, and both institutions have a strong and sustained relationship with the corporation. The classroom teacher test group will be composed of half Power Users and half teacher volunteers with minimal ArtsConnectEd experience. Each test group will be run through a series of scenario-based usability activities focusing on specific user needs identified in the research phase of the project. The results of this testing will be analyzed, and changes will be made to ACE II's design and programming where deemed necessary. Ensuring that

the new user interface is both effective and intuitive is critical in order to guarantee a painless transition for the large existing community of ArtsConnectEd users.

Data Management

Collection and other related institutional data within ACE II will be populated using the RSS protocol. Each institution will export data from their various information resources as RSS feeds that can be ingested by the new system. By building the RSS protocol into the application, ACE II leaves open the possibility to import information from other sources in the museum community that can provide RSS feeds. An extended data structure will be developed to permit the addition of education-specific metadata to collection-related records without affecting the internal integrity of this information. Image resources, which are currently stored in the proprietary Flashpix format, may be converted into Zoomify or another non-proprietary format if equivalent or better functionality can be achieved.

Phase III: Implementation

The implementation phase of the project focuses on comprehensive prelaunch testing of ACE II's new features and functionality in full operation. Each Power User will be contracted to propose, develop and field test one or more units of content using ACE II and the new tools. Project staff from both museums will review all of these content units to ensure that all of the new tools are being utilized. Power Users will send suggestions, problems, errors and other discoveries directly to museum staff through a common email address during the development of their content units. The emails will be organized and vetted by the project manager and reported to the project directors on a weekly basis. Iterative programming and design changes will be determined based on this feedback and communicated to the responsible project team member(s). All technical changes to the site will be communicated back to the Power Users as they are released.

Power Users will be asked to make classroom use of ACE II along with the content units they create. Each will be given six months to test the utility of the site and their experimental content unit(s) during the implementation phase. After this classroom testing period, Power Users will be asked to complete a formal survey on the overall utility of ACE II. Power Users will also be encouraged to make presentations and train peers on ACE II at local, regional and national levels.

Simultaneous to the Power Users testing, members of the Teacher Services Committee will begin working with their new content creation and administrative tools. Contracted content writers and museum educators from each institution will develop one or more units of content using the new content creation tools. These content developers will work to support, organize and index the projects being created and field tested by the Power Users as well as existing site content, using the new administrative-level tools. Formative feedback will be collected from these museum educators via email by the same vetting and production methodology used for the Power Users feedback. After supporting and administering the six-month classroom field testing period with the Power Users, the Teacher Services Committee will participate in focus groups to measure their increased independence in creating and managing content, as well as administering the entire site.

The last task in the implementation phase prior to the formal public launch of ACE II is the deliberate seeding of the subject level metadata for museum collection objects and resources by members of the educational community, similar to the approaches used in the STEVE folksonomy project (www.steve.museum). Tools to accept this type of annotation will be incorporated into all ArtsConnectEd records displays. A community of 25 to 30 volunteers will be recruited, each to annotate between 200 and 300 records over the six-month testing period. A contest with a variety of donated prizes will be designed to encourage the largest number of contributions possible. The outcome of this effort will be searches that yield better results for teachers, likely unfamiliar with the art historical terms and categories that dominate collections management databases.

Upon completion of all field testing and the initial subject level data contribution, ACE II will be publicly launched in place of the current ArtsConnectEd site. After project launch, classroom teacher contributions to the site will be voluntary, and museum contributions will continue as museum educators administer the site. This launch will be promoted using existing institutional and community communications vehicles such as mailing lists, electronic and print newsletters, museum magazines and teacher directed public events, such as the annual Educators Evening jointly sponsored by the partners.

Evaluation Plan

From the beginning, ArtsConnectEd has been a national model for Web site testing and evaluation. The original ArtsConnectEd was the first museum project to be formally tested through numerous iterations in a commercial usability lab. From this experience and a three-year statewide teacher-training program, ArtsConnectEd administrators have embraced a range of methodologies for analyzing and evaluating the utility of online resources. In 2005, focus groups were convened specifically to gather user input on how the current ArtsConnectEd could be improved, providing the impetus for this proposal. The ACE II project will fully utilize and build on this foundation with user feedback and formal evaluation as core elements of the project from onset to completion (see attached articles and reports: "ArtsConnectEd Focus Group Research Report; "ArtsConnectEd: Collaboration in the Integration and Access to Museum Resources"; "Pyramid Power: A Train the Trainer Model to Increase Teacher Usage of the ArtsConnectEd Online Resource").

Upon ACE II project initiation, the project team will contract Vanessa McKendall-Stephens of FaceValu Inc., an outcome-based evaluation specialist with previous experience evaluating online educational programs and resources. During the research phase, the evaluation specialist will work with the museum project team to formally define all intended outcomes and develop the evaluation plan. This plan will measure progress towards the outcomes throughout all three major phases of the project. The evaluation plan will incorporate a range of tested formative and summative assessment techniques including: 1) staff and end user focus groups; 2) print or electronic surveys; 3) email-based feedback mechanisms; 4) paper and lab-based usability scenarios; and 5) user observation.

A significant portion of the evaluation strategy will rely on formative techniques to facilitate iterative responses to expressed user needs. As previously described, the research phase of the project involves the collection and analysis of user responses from both internal and external users. The evaluator will develop instruments, procedures, criteria and summary documents for each one of these audiences in order to inform administrative level decisions and effectively achieve all defined outcomes. The resulting documentation will also serve as general points of reference for other institutions considering similar projects. Findings from all phases of this project will be made available online and will be presented as outlined in Section 5.

4. PROJECT RESOURCES AND MANAGEMENT

The Walker and the Institute have forged a lasting partnership in ArtsConnectEd that continues today. The administration and operation of this partnership have a history of meeting challenges through collaboration, which extends from education staff to technology departments. As a result, both museums bring highly qualified personnel with the technical depth, collegial rapport, and professional experience necessary to complete the project. Staff at both institutions have developed myriad innovative interactive media technologies to increase access to their collections. This fruitful partnership will provide the base for the successful execution of ACE II.

The Walker will serve as the fiscal agent, managing the grant funds and consultant contracts, and submitting timely reports. The Walker has successfully managed many grant-funded projects of ACE II's scope, including the recent IMLS-funded Art on Call project. Both institutions will provide staff and resources.

Project Director: Susan Rotilie (Walker Art Center) will serve as Project Director and will coordinate the evaluation process, the development of content, the dissemination of project results to other museum professionals, and reporting results to IMLS. Ms. Rotilie has more than 20 years of experience as an educator in museums and in the

classroom. As the Walker's Program Manager, School Programs, Ms. Rotilie leads the development of printed and online curricula and educational resources. Since 2000, she has developed and led ArtsConnectEd training sessions for educators throughout Minnesota, and co-manages ArtsConnectEd's combined resources for the Walker. Ms. Rotilie has served on numerous committees and boards and been a consultant to school districts and state agencies working on assessment and program planning in art education. In addition to her work at the Walker, Ms. Rotilie was co-director of the Minnesota Discipline-Based Art Education Consortium. Currently she serves on the Comprehensive Arts Planning Committee for Minneapolis Public Schools, among other service positions. Ms. Rotilie earned a B.F.A. in Art Education from Ohio University and completed the Art History/Museology program at the University of Minnesota, Twin Cities.

Project Co-Director: Treden Wagoner (The Minneapolis Institute of Arts) will work with Ms. Rotilie to coordinate the evaluation process, develop content, disseminate project results, and report to IMLS. Along with other museum educators working on the project, Mr. Wagoner will also inform the process for developing the site's new tools. Wagoner, Coordinator of Education Technology Programs at the Institute, has a M.A. in Education and is a state-licensed K-12 art educator. Mr. Wagoner has more than 15 years of experience teaching about art and has worked at the Institute for 10 years. He has been an integral part of outreach for ArtsConnectEd since the project's inception in 1998. His involvement has included coordination and instruction for the statewide ArtsConnectEd teacher-training program, and for the past three years he has also been the lead teacher trainer for ArtsConnectEd.

Project Manager: Scott Sayre, Ed.D., co-Principal of Sandbox Studios, will lead the development and implementation of the technical components of the project, including the open-source conversion and the addition of browser-based features and functionality. Dr. Sayre is a museum technology consultant with over 20 years of experience integrating technology in informal learning environments and has worked on the development of many digital resources including AMICO, ARTstor and Learning@Whitney. Prior to consulting, Dr. Sayre served as the Director of Media and Technology at The Minneapolis Institute of Arts from 1991-2002, overseeing interactive media, IT, telecommunications, and publications. He co-directed the original development of ArtsConnectEd and provides valuable expertise and experience. Prior to his museum work, Sayre held the position of Media Applications Specialist at the University of Minnesota's Telecommunications Development Center. He has a Doctorate in Education from the University of Minnesota and a M.Ed. and B.A. in Visual Communication Technology. Sandbox co-Principal Kris Wetterlund who served as the lead trainer in the initial ArtsConnectEd statewide teacher training program will work in partnership with Scott throughout the project. Kris has over 15 years of museum education experience and specializes in the development of online learning resources. She has a B.A. in Art Education from the University of Minnesota.

Technical Director: Robin Dowden (Walker Art Center) will work with Dr. Sayre to implement site changes and coordinate institutional resources, including media technology staff assisting with the project. She will participate in application development, coordinate Walker new media staff, and participate in the dissemination of project findings and reports. As the Walker's Director of New Media Initiatives, Ms. Dowden has helped build an infrastructure for the effective use of digital technologies to support museum programming that is recognized as a national model. In addition to directing the development of the Walker's Web site, she has lead responsibility for implementing information systems for public access of Walker resources, including Art on Call. In addition to ArtsConnectEd, she has also directed mnartists.org, an online resource for Minnesota artists developed by the Walker and The McKnight Foundation. Prior to joining the Walker, Ms. Dowden was the Collections Systems and Web Site Manager at the National Gallery of Art, Washington, D.C.

Technical Co-Director: Jim Ockuly (The Minneapolis Institute of Arts) will work together with Ms. Dowden to implement site changes and coordinate the Institute's technical resources. Since 2003, Mr. Ockuly has been the Director of Interactive Media at the Institute. In this position he oversees the Institute's Web site and related projects, and its in-gallery media installations. He has been with the Institute for over 15 years. As Senior Producer he garnered several awards for online programs about the Institute's collection, including Modernism

(www.artsmia.org/modernism) and Unified Vision: The Architecture and Design of the Prairie School (www.artsmia.org/unified-vision).

Evaluator: Vanessa McKendall-Stephens, Ph.D., (FaceValu Consulting, Inc.) will design and conduct outcome-based evaluation for the ACE II project. She will also assist in the design of the front-end input gathering process, testing of new tools, and usability labs. For the past 10 years, Dr. McKendall-Stephens has led projects varying in size, location and scope that include national multi-site and multi-year evaluations for educational institutions, foundations, non-profits and community-based organizations. She led the focus group evaluations of ArtsConnectEd in 2005. Her additional 20 years of experience at K-12 and University levels as an instructor and administrator provide valuable expertise for the evaluation of ACE II. Dr. McKendall-Stephens is an adjunct instructor of evaluation at the University of Minnesota and the University of St. Thomas and a regular presenter at the University of Minnesota's Evaluation Studies Institute and American Evaluation Association annual meetings. She holds a doctoral degree in educational policy and administration with a focus in evaluation studies from the University of Minnesota.

Inter-institutional Committees: In addition to project directors, technical directors and the project manager, Steering, Education, and Teacher Services committees will guide ACE II's development. The Steering Committee will be responsible for overall project progress; members will include the project directors, technical directors, project manager and the directors of education from both institutions. The Education Committee will ensure the site's usability and quality of educational content; members include directors of education from both institutions and key members of their staff. The Teacher Services Committee will inform the development of tools for museum educators; members of this committee will include staff from the two museums' education departments. These committees met regularly to guide ArtsConnectEd's development. Their shared knowledge and mutual commitment will foster ACE II's success.

Educational staff from both institutions will assist the project team in the development of content at percentages shown in the budget. Media technology staff will create web-based tools and redesign ArtsConnectEd II for an open source platform. Content writers and web programmers will be contracted to assist with implementation and development as described in Phases II and III.

Funds requested are for direct costs only, which represent 40 percent of the total project budget. These costs include consultant fees, 50 percent of hardware costs, Power User stipends, and travel for IMLS meetings and museum conferences to disseminate project results. The Minneapolis Institute of Arts and the Walker Art Center are contributing staff time as cost share, which comprises 60 percent of total project costs.

5. DISSEMINATION

Results from this project will be broadly disseminated during and after the project period. A public ACE II project blog will be set up at the onset of the project and will be announced on all museum-related discussions lists including MCN-L, Museum-L and Museum-Ed. All project team members will be encouraged to make regular postings on this site. The project directors, project manager and evaluator will commit to post all findings, observations and progress reports throughout the duration of the project. Other items such as wireframes, data dictionaries, usability scenarios and video and open-source tool lists will also be posted whenever possible. All field-testing participants will also be given areas to post any comments or observations they wish to share. Major publications including the final evaluation findings and the project reports will be made available as downloadable PDF documents, as printed reports, on the project blog, and also via links on Walker and the Institute's Web sites. The ACE II blog will also be published as an RSS feed, so updates will be dynamically available to newsreaders and other RSS enabled applications. The project blog and all its content will be maintained beyond the project period to serve as a community resource. Both the Walker and the Institute have developed similar online resources for previous projects: Art on Call (newmedia.walkerart.org/aoc/index.wac) and What Clicks (www.artsmia.org/what-clicks).

After the grant period has ended, ACE II will be marketed and shared with users through a planned series of state and regional teacher workshops. In addition, project participants will give presentations at conferences serving the museum and education communities, including WebWise, Museums and the Web, Museum Computer Network (MCN), the American Association of Museums (AAM) and the National Art Education Association (NAEA).

6. SUSTAINABILITY

The primary focus of this project is sustainability with an emphasis on empowering museum educators by giving them control of their online offerings. Museum educators worldwide have discovered the incredible potential of the Internet for disseminating museum resources and educational content, but have also discovered the obstacles presented when they do not have direct access to production and management tools. New technologies and tools now provide opportunities for education departments to take control of their online presence and better respond to the growing needs of the online user with minimal long-term commitment of finances or technically skilled human resources.

Over the last eight years, ArtsConnectEd has become a central component of both the Walker's and the Institute's education programs, both through its outreach to educators and the access to collections and related information it provides online. The current ArtsConnectEd Web site is maintained as a core feature of both museums' institutional Web sites. Both museums have made significant reductions in the provision of traditional hardcopy and fixed media educational services to redirect their energies and staffs towards the growth, advocacy and support of online educational resources through ArtsConnectEd. In pursuing ACE II, the two museums have reconfirmed their commitment to this unique partnership and the myriad benefits it provides. ACE II is the next logical step in sustaining the considerable resources invested in ArtsConnectEd by the Institute and the Walker, and will be maintained as a mission-critical service of both institutions.